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TWENTY YEARS of PRICES and INCOMES Received by Illinois Farmers 1929-1948

By G. L. Jordan

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Agricultural Experiment Station

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Urbana, Illinois September, 1950

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TWENTY YEARS OF PRICES AND INCOMES RECEIVED BY ILLINOIS FARMERS 1929-1948

By G. L. Jordan, Professor of Agricultural Economics

BECAUSE THE PERIOD 1929-1948 was one of great change, it affords an opportunity for more comprehensive analyses of some economic questions than would be possible in a less varied period. A number of studies of particular interest to Illinois farmers can be made. Several such studies are reported in this bulletin, including: the behavior of prices and incomes during a period of extreme fluctuation; changes in the importance of farm enterprises in Illinois as sources of income both during business cycles and over twenty years; and relative changes in prices farmers received and prices they paid.

During these twenty years the prices farmers received, when measured from peaks to troughs of cycles, fluctuated more than did the prices they paid for commodities used in production and for family consumption. This meant that the purchasing power of a unit of farm output changed considerably. Such changes affected the farmers' ability to provide a high level of living for their families and to pay their debts. During periods of rising and high prices farmers prospered as the result of the smaller rise in costs. During periods of declining and low prices the failure of farm costs to decline as much as the prices farmers received caused great financial hardship.

Not only did the purchasing power of a unit of farm products, in terms of goods and services farmers buy, change during the period, but so did the relationship between prices of individual farm products. This change in relationship was caused largely by unusual changes in demand resulting from the war and postwar needs and by changes in costs of production resulting from improved methods. Over the past seventy-five years the contributions of tobacco, fruits, eggs, chickens, and dairy products to gross U. S. farm income have increased substantially and the contributions of wheat, hogs, and cattle have declined.[1] Even during the twenty years being reviewed there were shifts in emphasis and relative importance of various crops, livestock, and livestock products as sources of income on Illinois farms.

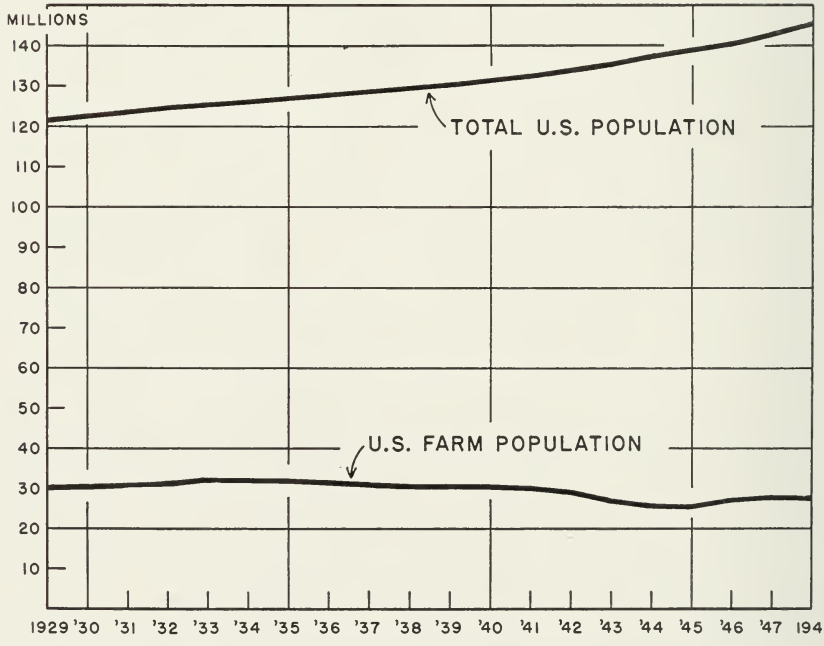
[1] Strauss, Frederick. The composition of gross farm income since the Civil War. National Bureau of Economic Research Bulletin 78, April 28, 1940.

Changes in demand were very much more important than changes in the quantity of farm products as causes of price changes, and still more important as causes of changes in farm incomes.

GENERAL CHARACTERISTICS OF THE PERIOD

World-wide economic and political upheavals characterized the twenty years covered by this study. Instability of prices and incomes led to unstable government in some countries, more dependence on government in others, and finally to World War II and its aftermath. The most stabilizing forces in the United States during this period were the steady increase in population and the absence of wide fluctuations in the volume of production of farm products. Contributing to and reflecting the uncertainty of the period were wide year-to-year variations in industrial output and construction, and rapid and large changes in prices, incomes, and exports.

Total population increased steadily; agricultural population declined. The total population of the United States, if the armed forces overseas are included, increased every year. If the armed forces over-



Population of the United States on January 1, 1929-1948. (Fig. 1)

seas are not counted, population declined in 1944 and 1945 and increased greatly in 1946. Total population increased from 121.1 million on January 1, 1929, to 145.4 million on January 1, 1948 (Fig. 1). This rise in population created a demand for more farm products.

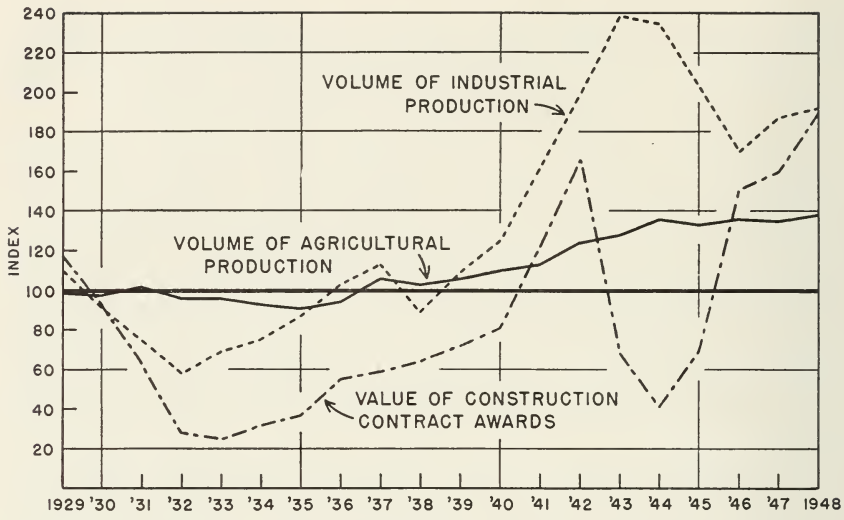
While total population increased 24.3 million during the period, the farm population declined 2.8 million. As a result of improved methods of production, however, a smaller farm population was able to produce more in 1948 than was produced in 1929. In 1929 the farm population made up 25 percent of the total population; in 1948 only 19 percent. The smaller the number of farm families who participate in receiving any given level of farm income the higher the income per family. During the war and postwar years the rise in income per farm family was greater, percentagewise, than the rise in total farm income.

Industrial production was less stable than farm output. The level of living of the people depends upon the volume of goods and services produced.[2] The level of prices depends upon the quantity of goods and services offered for sale in relation to the amount of money buyers are willing to spend.

Agricultural production fluctuated very little from 1929 to 1939 (Fig. 2). Thereafter there was a gradual but substantial rise in output until 1944, and the high level of 1944 was well maintained through 1948. Part of the wartime increase was due to favorable weather, part to improved technology (better varieties and more efficient power machinery), and part to strenuous efforts on the part of the reduced number of farmers. Agricultural production was much more stable than prices of farm products.

Industrial production fluctuated greatly during the period under review (Fig. 2). Output was governed largely by prospects for profits and by war needs. Prices of industrial products fluctuated much less than prices of farm products (Fig. 3 and Table 4 in Appendix), but output fluctuated more than it did for farm products. Wage-rate policies of organized labor and the insensitiveness of such costs as light, heat, power, and transportation doubtless contributed to the forced

[2] Federal agencies compute separate indexes of agricultural production and industrial production, but there is no good measure of the volume of services performed. The value of consumers' expenditures for various types of services has, however, been computed by the U. S. Department of Commerce for the period 1929-1948. See "Consumer Expenditures, 1929-43," Survey of Current Business, June, 1944, p. 6, and "Personal Consumption Expenditures by Type of Products, 1942-48," Survey of Current Business, July, 1949, p. 23, by William Shaw.

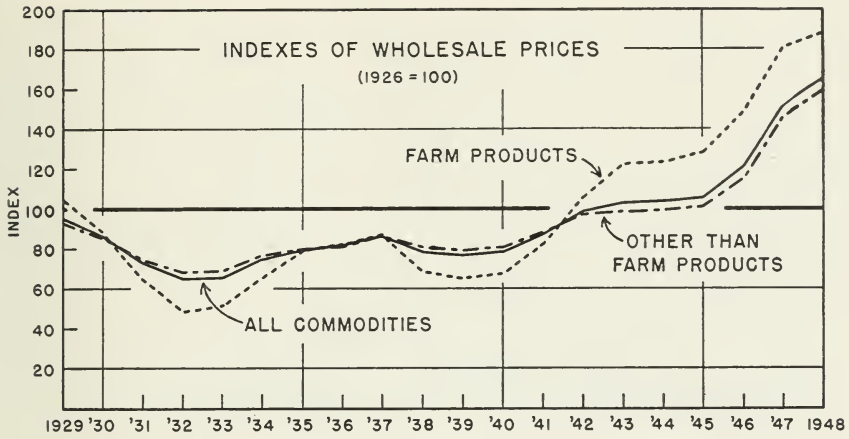


Indexes of volume of agricultural and industrial production in the United States (1935-1939 = 100), and index of value of total U. S. construction contract awards (1923-1925 = 100), 1929-1948. (Fig. 2)

closing of factories as the demand for the products declined. The ensuing unemployment contributed directly to the collapse of prices of farm products during depressions.

Industrial production increased more during the war than did agricultural production. Land is an important limiting factor in agricultural output, but the availability of labor and the assurance of profits were the most important limiting factors in industrial output. Government contracts assured profits on war work, and large increases in wage rates and patriotic motives induced a great increase in the number of industrial workers.

In peacetime such large increases in output of agricultural or industrial products would normally tend to depress prices. During World War II, however, prices rose in spite of the increased production and would have risen much higher had there not been price controls and rationing. The upward pressure on prices resulted from the fact that the excess production was siphoned off for war use and did not come back on the consumers' market although consumers had greatly increased incomes and were ready to buy. Prices did rise rapidly in 1946 when controls were removed. By then consumers had built up a reserve of buying power in the form of savings and an unsatisfied demand for all sorts of both durable and nondurable consumers' goods and were both able and willing to buy a great quantity of goods. Also, the fact



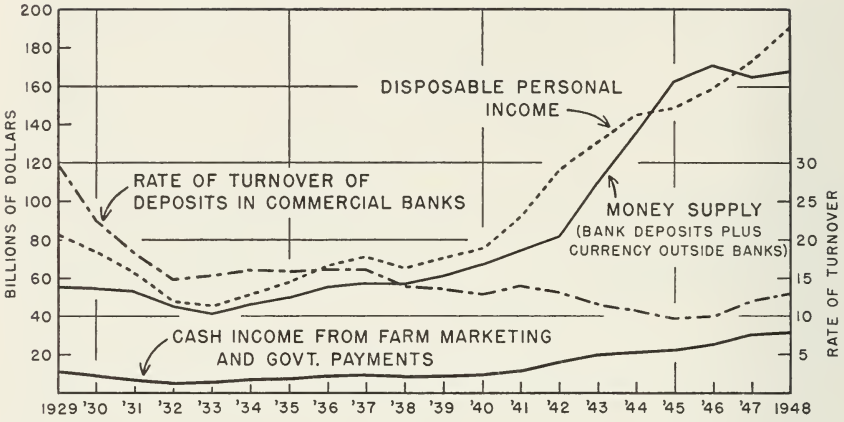
Indexes of wholesale prices in the United States, 1929-1948 (data from the Bureau of Labor Statistics). (Fig. 3)

that a relatively large fraction, compared with prewar, of the national output of both agricultural and industrial products was exported during 1946, 1947, and 1948 tended to keep prices up in spite of the high production.

Two opposing forces are at work during peacetime: from the standpoint of national welfare we wish maximum output; from the standpoint of the producer we want a high price per unit. Only with maximum output can we have maximum consumption and the highest level of living. But the larger the output the lower the price per unit, all other factors remaining unchanged. For some farm products, output in excess of normal (recent average production) not only reduces the price per unit but makes the total value of the large quantity less than the total value of a smaller quantity. Sometimes reductions in cost as the result of improved methods of farming offset the effect of the reduced market value. When this happens there is, of course, a great economic gain to society in the larger output.

Volume of building and construction fluctuated widely. The wide fluctuation in construction that has been going on for many decades is one of the most disturbing elements in our economy. It appears to be cyclical in nature, with the average cycle lasting fifteen years or more. Because the construction data in Fig. 2 are in dollar values, the fluctuations shown are greater than fluctuations in volume of construction.

Prices of farm products and farm income would fluctuate much less if industrial production and construction were stabilized more.



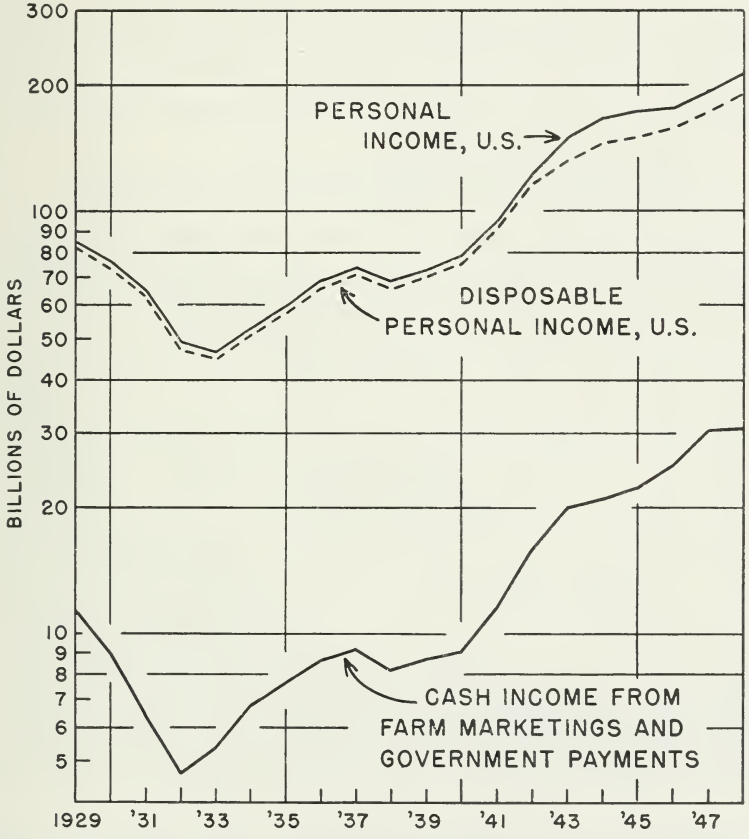
Disposable personal income, agricultural income, deposits in all banks on June 30 plus currency outside banks, and rate of turnover of deposits in commercial banks, United States, 1929-1948. (Fig. 4)

Personal income also fluctuated widely. The amount of personal income received by the people of the United States fluctuated greatly during this twenty-year period (Fig. 4). The high point of 1929 (85.1 billion dollars) was followed by a collapse to a postwar low in 1933 of 46.6 billion dollars after which there was a substantial recovery to 74 billion dollars in 1937. This was followed by a decline in 1938 to 68 billion dollars and a recovery to 78.3 billion dollars in 1940. It was not until 1941 that the 1929 income was exceeded, but after we entered World War II, personal incomes spiraled upward to a peak of 211.9 billion dollars in 1948. (Because of heavy income taxes beginning in 1943, the disposable personal income during and following the latter part of the war was considerably less than the total personal income. Farmers are interested primarily in disposable income because it affects consumers' demand for farm products more than total income.)

These wide fluctuations in total personal income were associated with wide fluctuations in prices of farm products. As incomes rose prices rose; as incomes fell prices fell. The great increases in income were made possible by a large expansion in the supply of money in the hands of individuals, businesses, and the government. The increase in the supply of money resulted from bank-credit expansion, that is, borrowings from banks by individuals, businesses, or the government. Contraction of personal incomes takes place when bank loans are repaid or people, and especially large business concerns, keep more money in the bank and spend less freely.

Total bank deposits were about 51 billion dollars on December 31, 1929, 38 billion in 1933, 68 billion dollars in 1941, and 142 billion dollars in mid-1948. Money in circulation outside of banks rose from 4½ billion dollars in 1929 to 28 billion dollars in 1948.

The rate at which we spent our money also varied. The faster we spend our money the more business a dollar of money supply will facilitate in a year. One dollar spent twice a month — that changes hands twice — will facilitate just as much business as two dollars spent only once a month. The annual rate of turnover of combined demand and time deposits in all commercial banks in the United States was 29.9 in 1929, 14.8 in 1932, 9.7 in 1945, and about 12.0 in 1947. The high rate of spending in 1929 was the result of optimism and lots of speculation; the low rate in 1932 was due to pessimism and the desire to



Personal income, disposable personal income, and agricultural income, United States, 1929-1948 (plotted on a semilogarithmic scale). (Fig. 5)

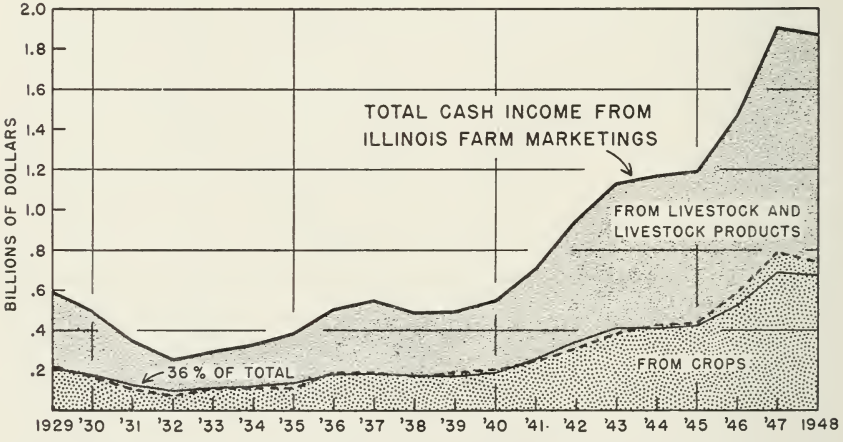
conserve cash balances. The 1945 rate of spending was so low because people could not spend their money. This was the last war year and goods were scarce, prices were fixed at a modest level, and personal incomes and bank deposits were very high. By 1947 more goods were available and commodity prices were no longer controlled.

Except for wartimes when goods are allocated to consumers and prices are controlled, high levels of national income and high rates of turnover of money occur at the same time. Both tend to permit prices to rise above what they would have been at lower income and turnover levels. Both tend to decline together and depress prices.

National agricultural income changes with total personal income but is a small fraction of it, averaging 13 percent for the period (Fig. 5 and Table 5 in Appendix). Percentagewise national agricultural income fluctuated more widely from period to period than did the total of personal incomes — the decline from 1929 to 1933 was greater and the rise from 1933 to 1948 was greater. (The ratio scale used in Fig. 5 makes it easier to directly compare rates of change over a period of time but can be deceiving with regard to actual amounts.)

AGRICULTURAL INCOME IN ILLINOIS

Annual income from farm marketings varied from 256 to 1,877 million dollars. Cash income from the sale of crops, livestock, and livestock products by Illinois farmers fluctuated from 593 million

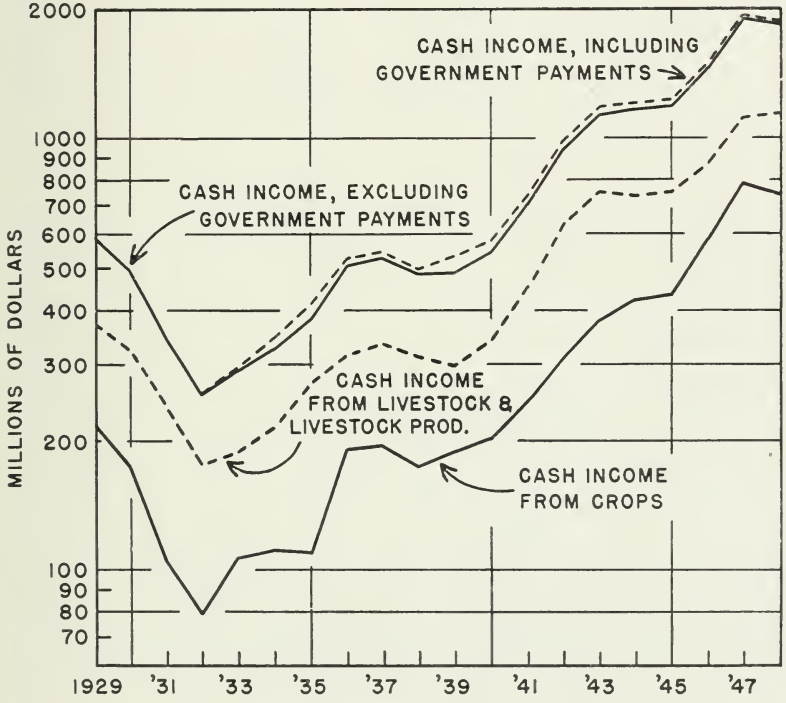


Cash income from farm marketings in Illinois, 1929-1948 (the solid line near the broken line represents 36 percent of total cash income from Illinois farm marketings). (Fig. 6)

dollars in 1929 to a low of 256 million dollars in 1932, then to a new high of 1,877 million dollars in 1948 (Table 1, Figs. 6 and 7). In addition Illinois farmers received government cash payments in connection with various federal farm programs ranging from $650,000 in 1933 to a high of $58,062,000 in 1943.

On the average, cash income from farm marketings in Illinois, excluding government payments, was about 5.9 percent of comparable income for the nation. The percentage varied from a low of 5.2 in 1934 to a high of 6.5 percent in 1940. From 1929 to 1935 the average Illinois cash income from marketings was only 5.4 percent of the comparable national agricultural income. From 1936 to 1941 the average was 6.2 percent; for the four war years, 1942 to 1945, it was 5.8, and following the war it was somewhat above the average figure for the twenty-year period.

The increase in proportion of national agricultural income coming to Illinois after 1935 was largely due to crops, with most of the credit



Cash income from farm marketings and government payments in Illinois, 1929-1948 (similar to Fig. 6 but plotted on a semilogarithmic scale). (Fig. 7)

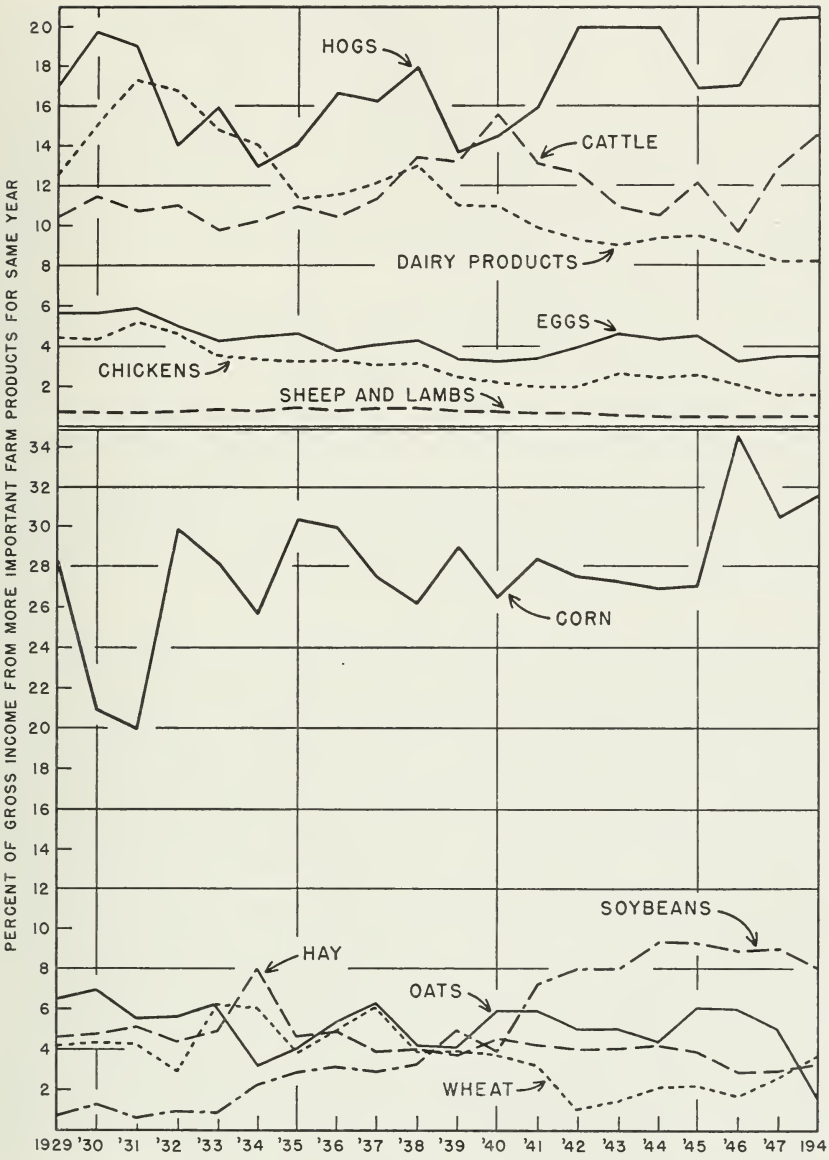
Table 1. — Cash Income From Farm Marketings and Government Payments, Illinois, 1929-1948[a] (in Thousands of Dollars)

	Cash income from farm marketings							
	From crops		From livestock and livestock products		Total		Income from government payments	Grand total value
	Value	Percent of national income from crops	Value	Percent of national income from livestock and products	Value	Percent of national income from total farm marketings		
1929	$217,784	4.4	$375,705	6.1	$593,489	5.3	0	$593,489
1930	174,363	4.5	323,412	6.2	497,775	5.5	0	497,775
1931	103,695	4.1	239,853	6.3	343,548	5.4	0	343,548
1932	78,780	3.9	177,315	6.5	256,095	5.4	0	256,095
1933	105,521	4.3	188,538	6.6	294,059	5.5	$ 650	294,709
1934	112,262	3.7	214,880	6.5	327,142	5.2	22,162	349,304
1935	109,600	3.7	272,828	6.6	382,428	5.4	34,010	416,438
1936	191,681	5.3	317,395	6.7	509,076	6.1	16,369	525,445
1937	194,920	4.9	334,580	6.8	529,500	6.0	15,393	544,893
1938	174,147	5.5	311,552	6.9	485,699	6.3	11,549	497,248
1939	189,415	5.6	297,810	6.6	487,225	6.2	46,454	533,679
1940	202,884	5.8	340,869	7.0	543,753	6.5	35,750	579,503
1941	247,701	5.3	455,414	7.1	703,115	6.3	33,509	736,624
1942	311,724	4.9	634,467	7.1	946,191	6.2	38,716	984,907
1943	380,823	4.8	751,048	6.6	1,131,871	5.9	58,062	1,189,933
1944	424,261	4.7	739,432	6.6	1,163,693	5.8	38,789	1,202,482
1945	435,555	4.6	753,150	6.3	1,188,705	5.5	36,574	1,225,279
1946	584,532	5.4	879,272	6.4	1,463,804	6.0	35,183	1,498,987
1947	787,780	5.8	1,121,689	6.8	1,909,469	6.3	11,151	1,920,620
1948	740,007	5.5	1,137,073	6.7	1,877,080	6.1	10,402	1,887,482

[a] Source: Illinois Cooperative Crop Reporting Service, Springfield, Illinois.

going to soybeans. From 1929 to 1935 income of Illinois farmers from the sale of crops averaged 4.1 percent and from livestock and livestock products 6.4 percent of the respective national totals. For the period 1936 to 1941 the Illinois fraction derived from crops was 5.4 percent and from livestock and products 6.8 percent. This was a much greater percentage increase for crops than for livestock and products. During the period 1942 to 1945 the fraction was 4.75 percent for crops and 6.6 for livestock and products. During the war livestock and products gained relative to crops; both actually declined as a percentage of the national totals. After the war the value of crops sold by Illinois farmers recovered to approximately the favorable prewar percentage of the national total. The European demand for U. S. exports of grain was very strong following the war and helped to support grain prices.

For the entire period income from the sale of crops averaged 36 percent and income from the sale of livestock and products averaged 64 percent of the income received by Illinois farmers from farm marketings.



Gross income from selected farm products as percentage of gross income from all important crops, livestock, and livestock products combined for the same year, Illinois, 1929-1948. (Fig. 8)

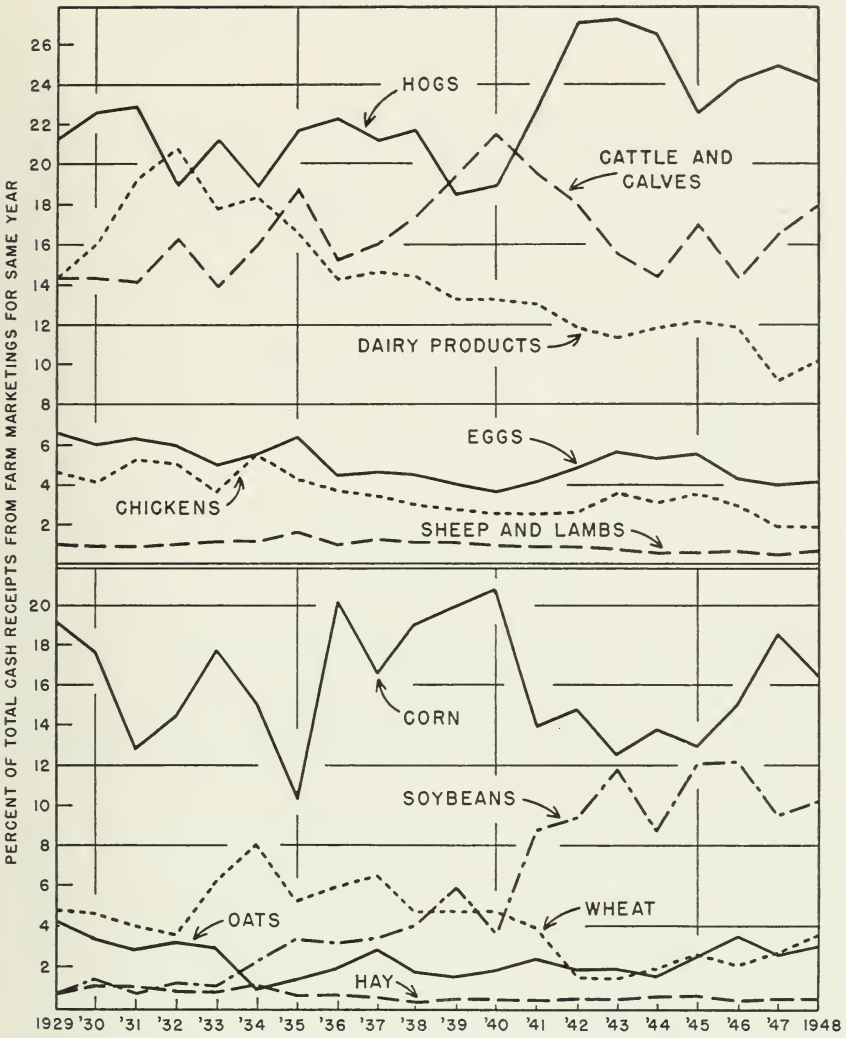
Importance of individual commodities as sources of income changed. Four outstanding relationships are shown by Fig. 8 and Tables 6 and 7 in Appendix: (1) the predominance of corn as a source of *gross* farm income[1] in Illinois; (2) the leadership of hogs among the livestock groups; (3) the downward trend, percentagewise, in dairy products, chickens, and wheat as sources of gross income; and (4) the very rapid increase in the importance of soybeans. (Fig. 8 includes all items that made up as much as 1 percent of the total, on the average, for the period.)

Hogs were by far the most important single source of *cash* income for Illinois farmers (Fig. 9 and Tables 8 and 9 in Appendix). Cattle and corn were next in importance. The fraction provided by dairy products declined so greatly over the twenty-year period and the fraction provided by soybeans rose so greatly that they were about equal in 1948. Wheat, oats, and eggs were relatively less important as a source of cash income, and chickens, sheep, and lambs were of minor importance. Fruits and vegetables were also minor sources of cash income for the state as a whole.

PRICES RECEIVED BY ILLINOIS FARMERS

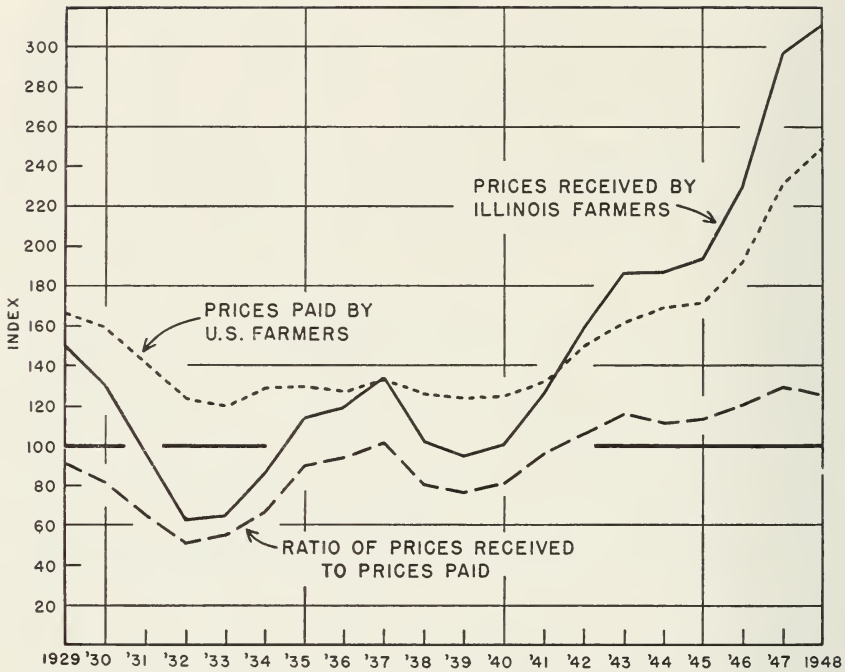
Prices received fluctuated more than prices paid by farmers. Prices received by Illinois farmers for products sold fluctuated widely over the 20 years 1929 to 1948 (Fig. 10 and Table 10 in Appendix). In only one year following 1920 had prices received by Illinois farmers been as high as in 1929. Then came a collapse from 151 percent of the 1910-1914 average in 1929 to 63 percent in 1932, a decline of almost 60 percent in three years. Prices in 1933 averaged about the same as in 1932, but a sharp recovery took place between March and July in 1933, and with minor interruptions continued to mid-1937. On a monthly basis the index stood at 148 in July, 1937. This was a rise of 130 percent from 1932 and almost equal to the 1929 average. Following mid-1937 there was another decline from which there was no sustained recovery until late 1940. After our entry into the war, prices of farm products rose rapidly until price ceilings checked the rise in 1943. Another very rapid rise occurred after price controls were removed in June, 1946. By 1947 the index was about 50 percent higher than the previous war-induced high yearly average of 202 in 1920.

[1] Gross income refers to cash income plus the value of produce used on the farm. The gross income from corn, for example, includes the value of corn fed on the farm. The value of the corn fed is also included in the gross income from livestock and livestock products.



Cash receipts from farm marketings of selected farm products as percentage of cash receipts from farm marketings of all crops, livestock, and livestock products combined for the same year, Illinois, 1929-1948. (Fig. 9)

The decline from 1929 to 1932 resulted from a drastic collapse of domestic and foreign demand. The recovery following 1933 was stimulated by such inflationary forces as revaluation of the dollar and increased government spending. Money supply increased rapidly as



Indexes of prices received by Illinois farmers for farm products sold and of prices paid by U. S. farmers for commodities, interest, and taxes (1910-1914 = 100), and the ratio between the two indexes. (Fig. 10)

the result of government borrowing from banks. Investments of all banks in government securities increased from less than 7 billion dollars in mid-1932 to 17.3 billion dollars in mid-1936. Although the federal government helped finance private business during that period, total loans of all banks declined from 27.9 billion dollars in mid-1932 to 20.6 billion dollars in mid-1936.

Prices paid by farmers for commodities used in production and in the household fluctuated less in degree than prices received by farmers. When interest and taxes are included, the prices-paid index becomes still less sensitive to changes in demand. The result is that the purchasing power of farmers' incomes fluctuated also but less than prices of farm products. During and following World War II prices farmers received for their products rose in a spectacular manner, but a large part of the benefit from this price rise was nullified by the rise in prices paid. Nevertheless the ratio of prices received by Illinois farmers to prices paid by U. S. farmers rose 45 percent, from an average of 89 for 1935-1939 to 129 in 1947. Illinois farmers were even more

prosperous in 1947, compared with the prewar years, than the parity ratio indicates because of a very substantial increase in farm output at the same time.

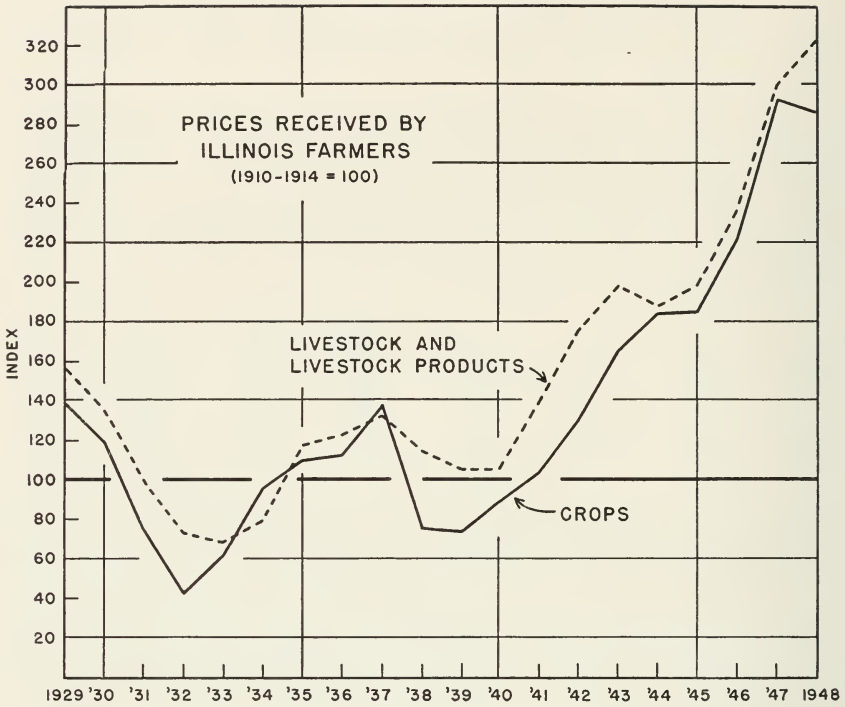
Price movements of important farm products vary considerably. Most of the important forces affecting the demand for farm products tend to cause prices of all farm products to rise or all to fall (Table 11 in Appendix). The general movement of prices received by Illinois farmers for all products combined during this period can be seen from these indexes (1910-1914 = 100):

	Index		*Index*		*Index*		*Index*
1929	151	1934	86	1939	95	1944	187
1930	130	1935	115	1940	101	1945	194
1931	91	1936	119	1941	127	1946	231
1932	63	1937	134	1942	160	1947	297
1933	65	1938	102	1943	187	1948	311

Quite often, however, individual products do not follow the trend for all products combined. Demand may be shifting and one product may therefore be favored over another. Or changes in output may affect the relative prices of various products. These changes in output affect prices more than incomes because there are usually compensating price changes for changes in output. A bumper crop brings low prices per unit and a small crop brings higher prices per unit, so with no change in demand the gross receipts vary less than output.

By dividing the index of prices received for a selected commodity by the index of prices received for all farm products combined, we can observe tendencies for certain products to increase or to decrease in price relative to all prices, and we can observe which commodities are highest in price or lowest in price relative to the 1910-1914 base period. We thus have a measure of changes in the purchasing power of one unit of a selected commodity in terms of all the commodities used in the combined index. This is illustrated for the two groups, crops and livestock and livestock products, in Fig. 11, for other groups of commodities in Fig. 12, and for individual commodities in Fig. 13 and Table 12 in Appendix.

In Fig. 11 the lines representing crops and livestock and livestock products are the equivalent, when properly weighted, of the line representing the combined index. All tend to move in the same direction but two differences are apparent. (1) Crop prices were more sensitive to changing demand than were prices of livestock and products, or supplies of crops changed more rapidly from year to year, or both; crop prices fell farther in depressions and rose sooner and faster in the

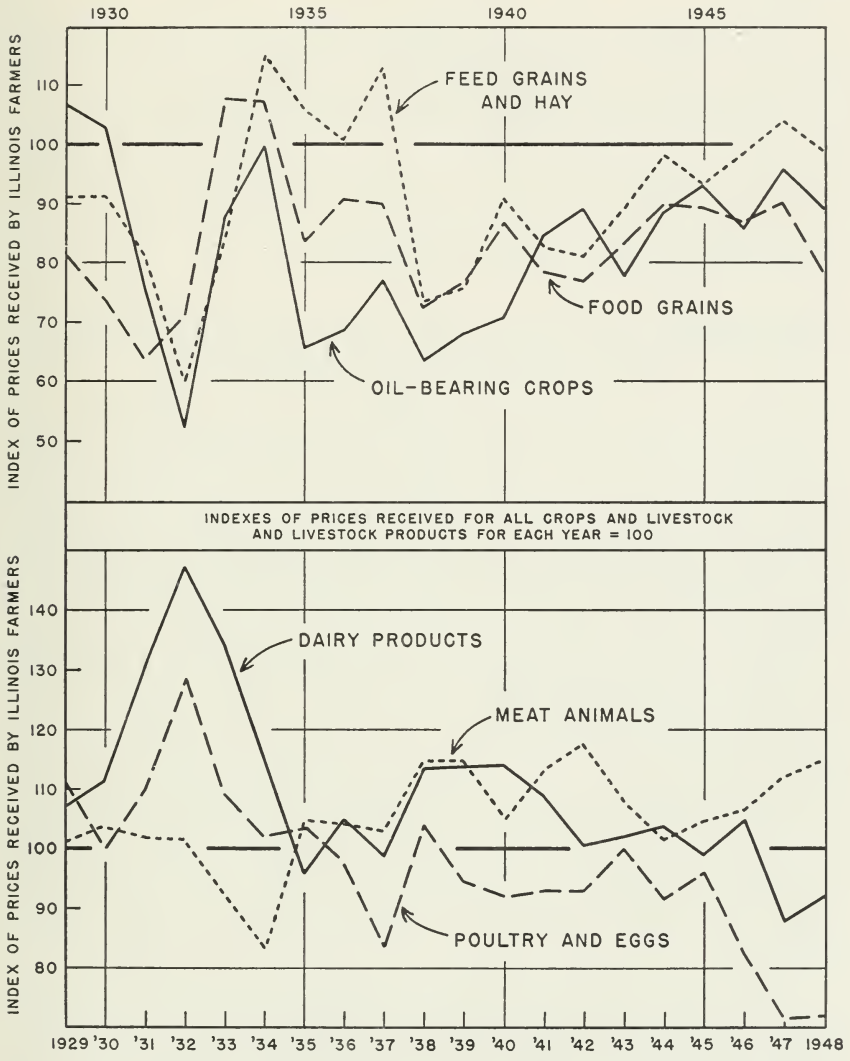


Indexes of prices received by Illinois farmers for crops and livestock and livestock products, 1929-1948. (Fig. 11)

early recovery period. (2) Prices of livestock and products maintained a higher level than prices of crops relative to the 1910-1914 base throughout most of the period studied. That fact probably is related to the greater reductions in costs of production of major Illinois crops than in costs of livestock production, and possibly to changes in demand reflecting changing consumer food habits. The change in relationship had occurred prior to 1929, as indicated by the height of the index for prices of livestock and products at that time. Over a period of years feed-grain prices are closely related to prices of livestock and products, but the demand for bread grains has shown a tendency to weaken in peacetimes.

In Figs. 12 and 13 we are not so much interested in the position of the groups relative to the 100-percent line as we are in the fluctuations and trends shown by the slope of the lines. The position relative to the 100-percent line is influenced by what took place between the

base period, 1910-1914, and 1929. During that time prices of livestock and livestock products rose relative to the base period, so the indexes of prices of livestock and products were consistently higher than the indexes of prices of crops. Thus they started the 1929-1948 period at



Indexes of prices received by Illinois farmers for various crops, livestock, and livestock products as percentage of index of prices received for all crops, livestock, and livestock products for the same year, 1929-1948. (Fig. 12)

a higher level than crops and stayed higher. If corrected for this disadvantage for crops in 1929, the scales would be changed so that the 100-percent line for crops would be down about 8 percentage points and the 100-percent line for livestock and products would be raised 4 points.

The correlation between changes in prices of individual commodities and changes in cash income from the sale of the same commodities is not specially high. The decline in income from dairy products as a percentage of the total cash income of Illinois farmers was only partly the result of a relative decline in prices of dairy products. Neither was the increasing importance of soybeans as a source of income due to a comparable increase in prices. There have been important shifts in emphasis on different farm enterprises.

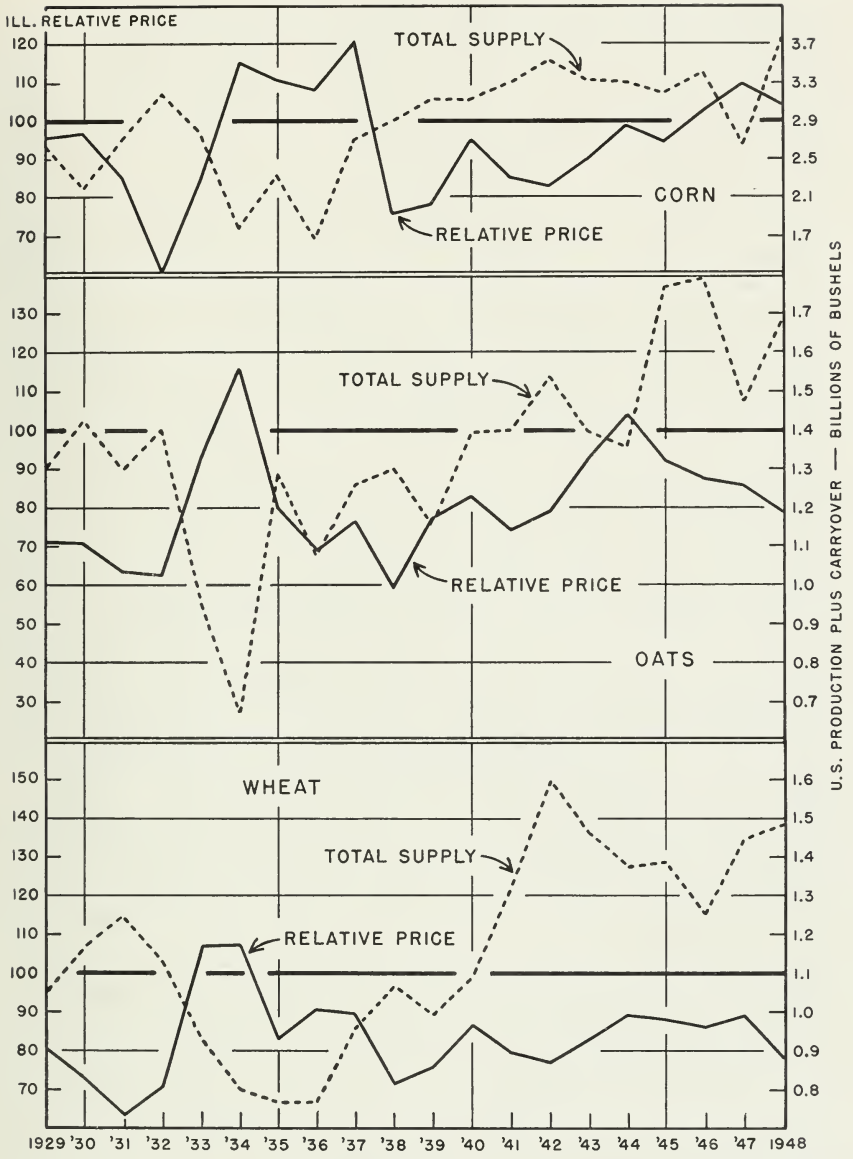
CHANGES IN PRICES OF AND INCOMES FROM SELECTED FARM PRODUCTS

If the prices of individual commodities had maintained the same relationship to each other that they had in 1910-1914, they would be represented by the horizontal 100-percent line in Fig. 13. Actually prices of wheat, oats, barley, sheep, and eggs were quite low compared with their relationship to prices of other commodities in 1910-1914. Those declines were offset by relatively high levels for prices of soybeans, beef cattle, lambs, veal calves, milk cows, chickens, and wool.

Corn. During the early part of the depression, 1930 and 1931, prices of crops declined much more than prices of livestock and livestock products. All prices declined, but corn prices were only about 60 percent as high as prices of all Illinois farm products in 1932. Corn prices recovered rapidly in 1933 and were raised to unusually high levels, relative to prices of all farm products, as the result of the drastic cut in production caused by the drouths of 1934 and 1936. Following World War II corn prices were again relatively high — at about the same level relative to prices of all farm products as they were in 1910-1914.

Gross income from corn remained fairly stable at 27 to 28 percent of gross income from all farm products after the recovery from the 1930-1931 dip until 1946. Since 1946, corn has made up about 30 to 32 percent of gross farm income in Illinois.

Most of the corn raised in Illinois is fed to livestock by the grower



Indexes of prices received by Illinois farmers for selected farm products, 1929-1948, and supplies of same products (indexes are expressed as percentage of index of prices received for all farm products combined for the same year; 1910-1914 = 100 for each farm product and all farm products combined). (Fig. 13)

(*Graph is continued on pages 54, 57, 58, and 60*)

or sold to another feeder. Cash receipts from the sale of corn are a much smaller fraction of total cash receipts than was indicated for gross income from corn. They also fluctuate widely, as shown in Fig. 9, page 47. They average about 16 percent of all cash income from marketings by Illinois farmers.

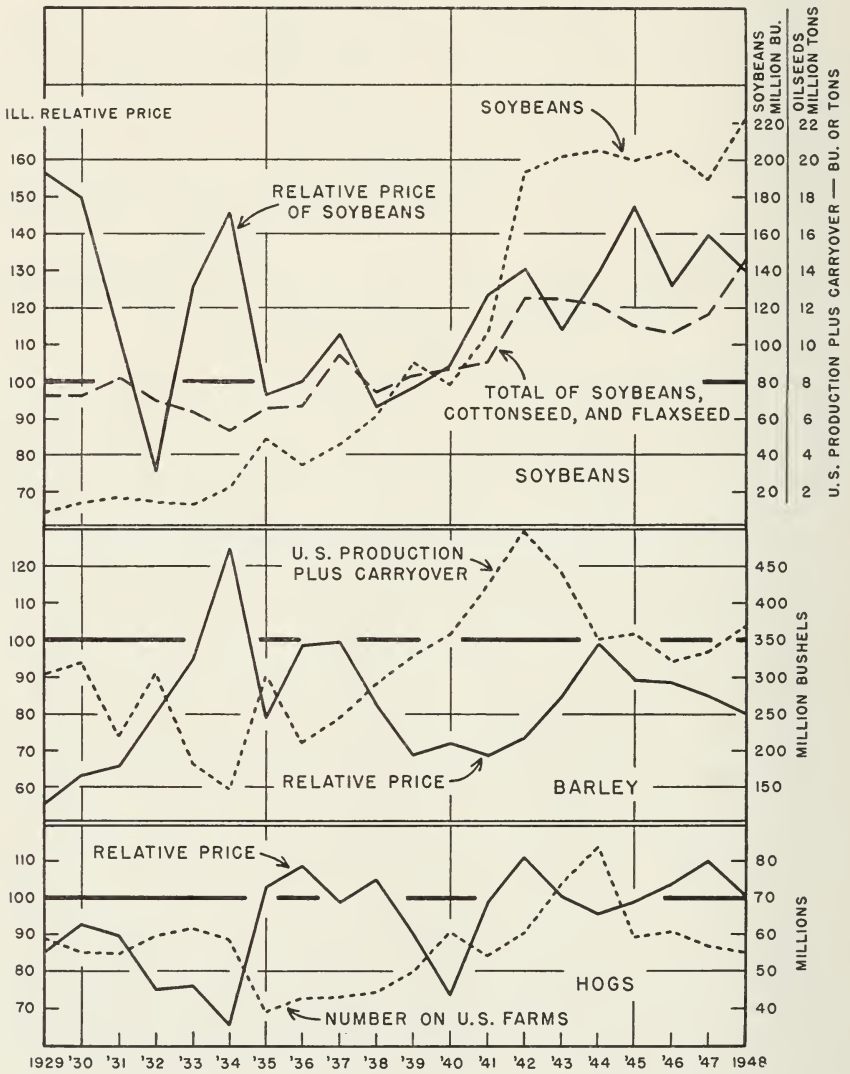


Fig. 13 — Continued

Wheat. Wheat prices have been consistently below their 1910-1914 relationship to prices of other important Illinois farm products, except during and immediately following the devaluation of our currency in 1933 and 1934. Being an export crop, it was specially favored by devaluation. Wheat prices are dominated by world conditions; hence the high level of production in the United States in 1947 and 1948 did not cause a serious collapse in prices. Large quantities were exported to Europe. The purchases were financed directly or indirectly to a large extent by the United States and exports were also heavily subsidized.

Wheat is not a major Illinois crop. Gross income from wheat makes up only 2 to 4 percent of total gross farm income in Illinois. In the 1930's it averaged about 5 percent. Wheat is a cash crop and the cash receipts from wheat as percentage of total cash receipts fluctuated with and were at about the same level as gross income.

Oats. Gross income and cash receipts from sales of oats represent a rather small percentage of Illinois farm income. Gross income is a larger percentage of total gross income than cash receipts from sales of oats are of total cash receipts because so much of the oats is fed on the farm where grown. Like corn, the portion fed receives credit as part of gross income.

Prices of oats, relative to prices of all farm products, fluctuated with production, but there has been a tendency for prices to strengthen, after adjustment is made for changes in production.

Barley. Prices and production of barley in Illinois were quite erratic during this twenty-year period. Output was reduced by the 1934 and 1936 drouths but increased rapidly between 1936 and 1942. It is an insignificant crop in Illinois, contributing less than 1 percent to total gross farm income.

Soybeans. Prices of soybeans were high relative to 1910-1914 and tended to increase relative to prices of other farm products during the latter half of the period in spite of a very large increase in production of soybeans and of the three oilseeds — soybeans, cottonseed, and flaxseed.

The combination of rapidly rising production and generally rising prices relative to other farm products caused an extremely rapid rise in farm income from the sale of soybeans. They accounted for only about 1 percent of total cash farm income from 1929 to 1933 and for about 10 to 12 percent between 1942 to 1948. Production of soybeans was reduced less by the 1934 and 1936 drouths than was the production of corn and small grains.

Alfalfa hay. Production of alfalfa hay in the United States increased rapidly during the period and the price declined relative to the prices of other farm products in Illinois. Little hay was sold in Illinois; hence cash income from sales of hay was insignificant, but all hay accounted for 3 to 5 percent of total gross income.

Hogs. Cash income from sales of hogs was a larger fraction of total cash income in Illinois from 1929 to 1948 than cash income from any other commodity. The percentage ranged from a low of about 19 percent to a high of about 27 percent. In the early depression years of 1930-1933 milk was a close competitor of hogs, and in 1939 and 1940 both corn and beef cattle ranked about the same as hogs as sources of cash farm income in Illinois; but those years were exceptions.

Hogs were second only to corn as the most important source of gross farm income. Much of the corn was fed to hogs, thereby reducing the cash income from corn and increasing it relatively for hogs.

Hog prices relative to prices of all farm products tended to fluctuate with production from year to year, heavy marketings or large numbers being associated with relatively low prices. In general, prices of hogs strengthened in spite of a tendency for numbers to increase. They ended the period with about the same relationship to prices of all farm products combined as existed in 1910-1914.

Beef cattle. Beef-cattle prices during the period averaged very high compared with prices of all farm products. Prices fluctuated widely over the period in relation to prices of all farm products and inversely with numbers of cattle (other than milk cows) on farms and ranches January 1. Cycles in production and purchasing power or relative prices are obvious (Fig. 13). Changes in income from beef cattle were more closely and positively correlated with changes in prices than with changes in numbers. Therefore income from beef cattle reached its peaks at times of relatively high prices for beef cattle when cattle numbers were low.

Sheep and lambs. Lamb prices were very high during this twenty-year period compared with their relationship to prices of all farm products in 1910-1914. Sheep prices by contrast were very low and the trend in relative prices was markedly down. There was no clear relationship between prices and numbers on farms.

Income from sheep and lambs combined made up less than 1 percent of total gross farm income in Illinois during the entire period.

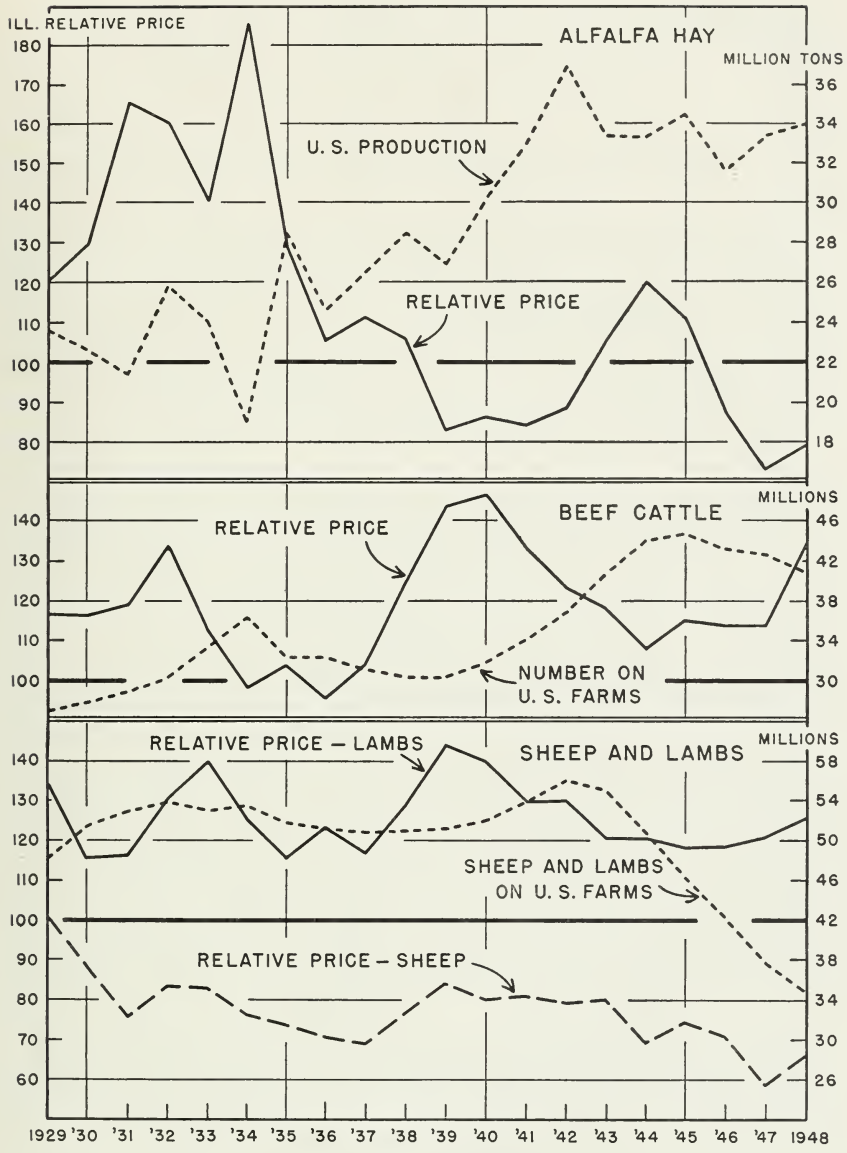


Fig. 13 — Continued

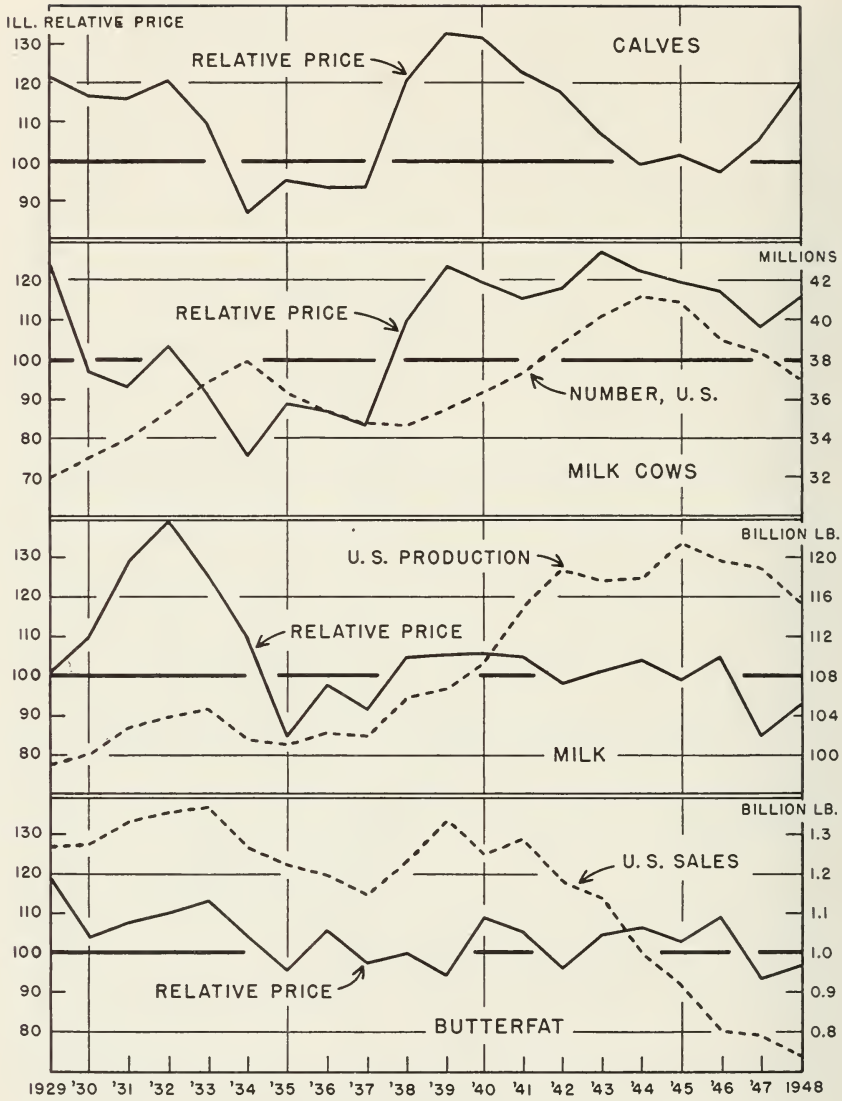


Fig. 13 — Continued

Veal calves. Prices of veal calves tended to be high compared with the relative prices of all farm products. They also tended to be high at the same time that prices of beef cattle were high.

Milk cows. Prices of milk cows were low relative to prices of all farm products from 1930 to 1937 and high from 1938 to 1948.

Milk and butterfat. During the severe depression of the early 1930's prices of milk and income from the sale of dairy products declined much less than prices and income from the sale of other farm products. Production of milk and butterfat increased at the same time. Milk prices retained their 1910-1914 relationship to prices of other farm products during the latter half of the period in spite of a phenomenal increase in milk production in the United States. Butterfat prices also retained their 1910-1914 relationship in spite of a drastic reduction in output after 1941.

Dairy products were almost as important a source of farm income in Illinois as any other commodity — hogs, beef cattle, or corn — in the early 1930's, but their importance later declined greatly. In 1947 and 1948 cash receipts from dairy products were only 10 percent of cash receipts from the sale of all farm products in Illinois. If there is a severe or protracted decline in prices of farm products as a group, income from the sale of milk probably will become a larger percentage of total farm income in Illinois.

Wool. Prices of wool were very erratic during the period. Prior to World War II, wool prices fluctuated with consumption but not with domestic production. We import a large fraction of our wool, and prices are governed partly by world conditions of supply and demand. The Agricultural Act of 1949 called for government support prices high enough to raise the level of wool production substantially above that of the postwar years shown in Fig. 13. Wool was a very minor source of farm income in Illinois.

Chickens and eggs. Cash receipts from the sale of eggs ranged from 4 to 6 percent of total cash receipts by Illinois farmers during the latter half of the period studied. The longer-time tendency appeared to be downward. Chicken sales brought in from one-half to two-thirds as much as egg sales and the downward trend appeared to be stronger for chickens than for eggs (Fig. 9).

During the period egg prices were very low and declining when compared with the 1910-1914 relationship of prices of all farm products. Prices of chickens were relatively high and declining.

Egg production in the United States was 50 percent higher after World War II than in the mid-1930's. Following a great increase during World War II, chicken production declined to prewar levels by 1948.

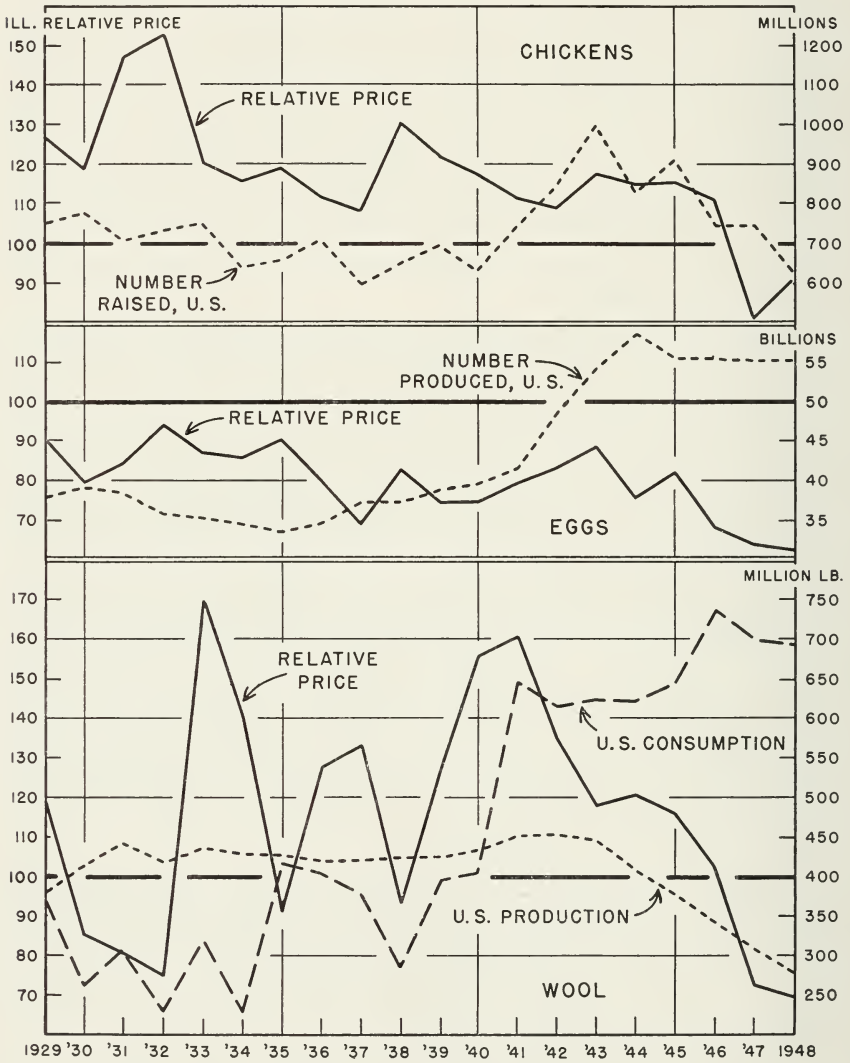


Fig. 13 — Concluded

SEASONAL MOVEMENTS OF PRICES OF ILLINOIS FARM PRODUCTS, 1931-1941

Price fluctuations from month to month and from year to year are the results of changes in actual and anticipated supplies and changes in consumers' and dealers' ability and willingness to buy. But all farmers know that in the absence of any change in demand (ability and willingness to buy) the price of a crop is likely to be lower at harvest time than during any other season of the year, and prices of livestock and livestock products are likely to be lowest at the season of the year when marketings are heaviest. The prices tend to be lower as the result of the seasonally increased supplies.

Producers are interested in seasonal price movements because of the possibility of regulating production and marketing in order to benefit most from such movements. They may find it profitable to avoid sales during periods of lowest seasonal prices, or they may decide that the rise in prices resulting from avoiding seasons of greatest sales by others may not pay for all the costs and worry involved in such a production and marketing program. If they do decide to try to avoid seasons of lowest prices, they may do it either by following a production pattern somewhat different from the average or by storing the product for sale later in the same season. Either procedure is likely to add to the final cost of the product to the farmer as it leaves the farm.

The amount of the seasonal variation is related to the costs of storage, the quantity available for sale, and to changes in the opinions of buyers and sellers with regard to probable changes in demand. The costs of storage which must be considered include: (1) depreciation on the physical facilities used for storage; (2) any costs of putting the goods into storage and removing them later above the cost of marketing directly from the field; (3) deterioration of quality; (4) risk of loss by fire, rodents, or theft; (5) taxes; (6) insurance; and (7) interest on the investment. The possibility of a decline in prices as the result of a decline in demand or an increase in output of that commodity or a competing commodity in any part of the world must be given consideration. Obviously some inducement must be offered the producer to assume the costs and risks involved in withholding part or all of his crop from the market or he would sell it all at harvest time.

From the point of view of the consumer a service is being rendered by the storer for which the consumer is willing to pay. The goods are placed on the market at a time when he needs them.

Table 2. — Indexes of Seasonal Variation in Prices of Selected Illinois Farm Products, 1931-1941[a]

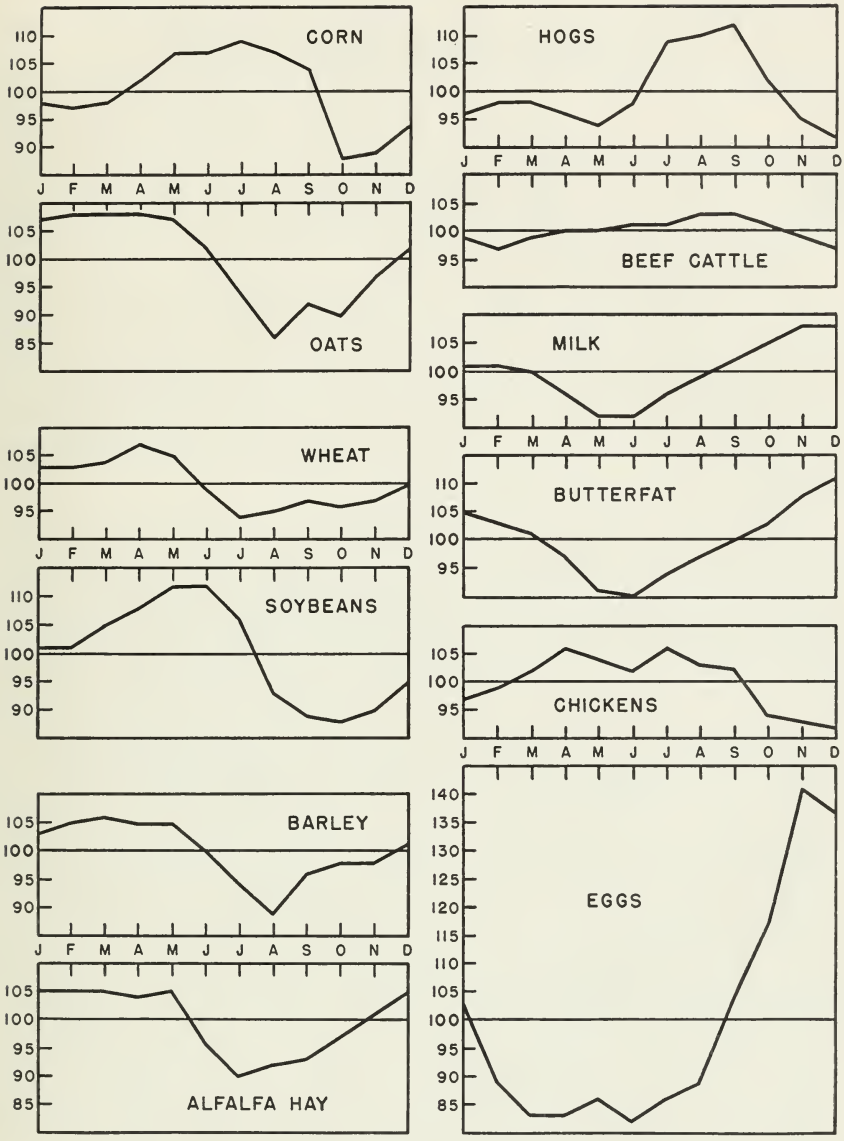
Product	Index for each product											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Corn	98	97	98	102	107	107	109	107	104	88	89	94
Oats	107	108	108	108	107	102	94	86	92	90	97	102
Wheat	103	103	104	107	105	99	94	95	97	96	97	100
Soybeans	101	101	105	108	112	112	106	93	89	88	90	95
Barley	103	105	106	105	105	100	94	89	96	98	98	101
Alfalfa hay	105	105	105	104	105	96	90	92	94	97	101	105
Milk, wholesale	101	101	100	96	92	92	96	99	102	105	108	108
Butterfat	105	103	101	97	91	90	94	97	100	103	108	111
Chickens	97	99	102	106	104	102	106	103	102	94	93	92
Eggs	103	89	83	83	86	82	86	89	104	117	141	137
Hogs	96	98	98	96	94	98	109	110	112	102	95	92
Beef cattle	99	97	99	100	100	101	101	103	103	101	99	97

[a] Computed by the link-relative method using the arithmetic means of the three median link relatives. Basic data were from the Illinois Cooperative Crop Reporting Service. Prepared largely under the direction of E. J. Working.

The indexes of seasonal variation in prices of important Illinois farm products in Table 2 and Fig. 14 are based on prices received by Illinois farmers during the prewar period, 1931-1941. The war years were not included because of the influence of various government controls on prices. The indexes represent the percentage that prices for a given month tended to be of the yearly average after the influences of major changes in demand and year-to-year changes in supply were eliminated. They represent general tendencies only. During the 1929-1948 period changes in demand or large changes in year-to-year supply overshadowed the usual seasonal factors as price-making forces.

Livestock and livestock products. The seasonal price movements of meat animals, poultry, and milk are influenced largely by the quantities ready for market. Storage on the farm is a minor item, although it is possible to hasten or defer marketings of livestock somewhat to avoid the season of greatest flow to market. Storage operations of packers of meat and poultry, processors of butter, cheese, and other manufactured dairy products, and dealers in eggs are substituted for farm storage of animal products. For all of these products the duration of storage is limited by the perishability of the product.

The livestock prices from which the seasonal indexes in Table 2 were calculated presumably represented the prices received for all hogs or all cattle sold by those reporting, regardless of the class or grade. The index of prices received for beef cattle is, therefore, a mixture of indexes of prices of different grades of cattle. Seasonal indexes of prices of beef steers, by grades at Chicago (Table 3 and Fig. 15), indicate the contrast in seasonal price movements of the best grades of



Indexes of seasonal variation in prices of some Illinois farm products (averages of 1931-1941). (Fig. 14)

Table 3. — Indexes of Seasonal Variations in Prices of Beef Steers by Grade at Chicago, 1931-1941[a]

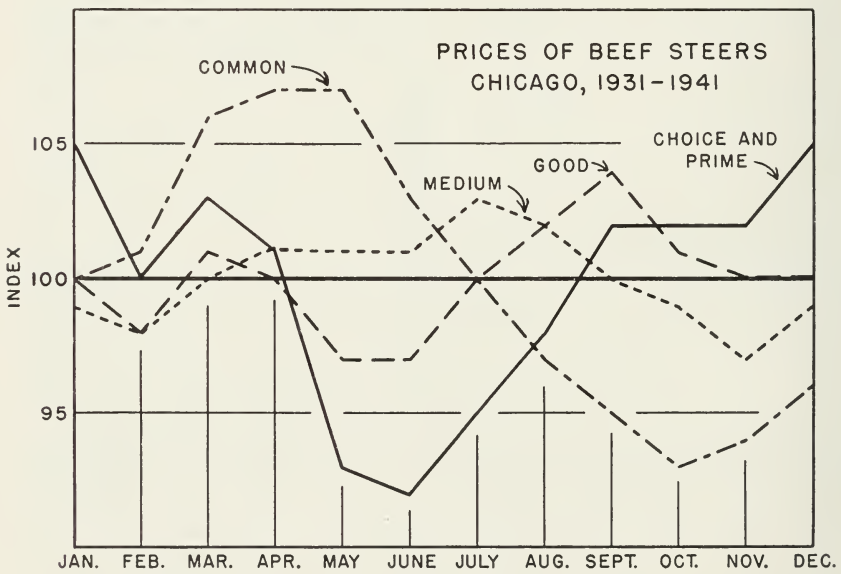
Grade	Index for each grade											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Choice and Prime	105	100	103	101	93	92	95	98	102	102	102	105
Good	100	98	101	100	97	97	100	102	104	101	100	100
Medium	99	98	100	101	101	101	103	102	100	99	97	99
Common	100	101	106	107	107	103	100	97	95	93	94	96

[a] Contributed by W. J. Wills.

butcher steers and lower grades represented largely by stockers and feeders.

During the period 1931-1941 prices of Choice and Prime steers at Chicago averaged 13 percent above prices of Good steers. Medium-grade steer prices were 15 percent below prices of Good steers, and Common steer prices averaged 30 percent below.

Field crops. Buyers, sellers, and feeders respond differently in years of large crops and small crops. The December to May rise in prices of corn tends to be more than average following the harvest of very large crops and less than average following the harvest of exceptionally small crops of corn. Increasing numbers of livestock also tend to



Indexes of seasonal variation in prices of beef steers by grade at Chicago (averages of 1931-1941). (Fig. 15)

strengthen May corn prices relative to the previous December prices and decreasing numbers have the opposite effect. From July to December corn-price movements are influenced to a considerable extent by new crop prospects.

The seasonal movements of soybean prices appear to be changing. In the early 1930's the October price was very low relative to the season's average price and there was a steep rise until the top price of the season was reached about September. For the 1936-1941 period the extent of the seasonal spread was reduced and the peak of prices came earlier, in June or July. In 1947 and 1948 the peak in prices came about May or June, but a very large fraction of the seasonal rise had occurred by mid-January. If farm storage becomes more common, a part of the heavy discount taken by soybean sellers in October and November will disappear.

SUMMARY

The twenty years 1929 to 1948 covered a period in which farmers were subjected to extreme year-to-year changes in prices of the products they sold and in incomes. But on the whole Illinois farmers were more prosperous and in a better financial position at the end of the period than at the beginning.

Prices of individual farm products rose and fell with personal incomes in the United States — from a low of 63 percent of the 1910-1914 average in 1932 to a high of 311 percent in 1948. The year-to-year changes in prices of farm products were caused very largely by changes in demand, except in 1934 and 1936 when drouths cut down the quantity of crops marketed. The prices farmers paid for commodities, services, interest, and taxes varied in the same direction as the prices they received but the variation was not so great.

During the twenty years soybeans increased greatly in importance as a source of farm income. Corn maintained its dominant position as a source of gross farm income. Hogs were the chief source of cash income; in the last few years of the period, during and following World War II, cash income from sales of hogs was a larger fraction of total income from sales than the average for the twenty years. Over the twenty years, income from sales of livestock and livestock products averaged 64 percent of total income from farm marketings, and income from crops averaged 36 percent. They varied little from these figures.

APPENDIX TABLES

Table 4. — Indexes of Wholesale Prices of All Commodities, Farm Products, and Other Than Farm Products U. S., 1929-1948[a] (1926 = 100)

Year	Index of all commodities	Index of farm products	Index of other than farm products
1929	95.3	104.9	93.3
1930	86.4	88.3	85.9
1931	73.0	64.8	74.6
1932	64.8	48.2	68.3
1933	65.9	51.4	69.0
1934	74.9	65.3	76.9
1935	80.0	78.8	80.2
1936	80.8	80.9	80.7
1937	86.3	86.4	86.2
1938	78.6	68.5	80.6
1939	77.1	65.3	79.5
1940	78.6	67.7	80.8
1941	87.3	82.4	88.3
1942	98.8	105.9	97.0
1943	103.1	122.6	98.7
1944	104.0	123.3	99.6
1945	105.8	128.2	100.8
1946	121.1	148.9	114.9
1947	151.7	181.0	145.5
1948	165.1	188.3	159.8

[a] Source: U. S. Department of Labor, Bureau of Labor Statistics.

Table 5. — Personal Income, Disposable Personal Income, and Income From Sales of Farm Products Plus Government Payments, U. S., 1929-1948[a]

Year	Total personal income	Disposable personal income	Cash income from farm marketing[b]
		(billions of dollars)	
1929	85.1	82.5	11.3
1930	76.2	73.7	9.0
1931	64.8	63.0	6.4
1932	49.3	47.8	4.7
1933	46.6	45.2	5.4
1934	53.2	51.6	6.8
1935	59.9	58.0	7.7
1936	68.4	66.1	8.7
1937	74.0	71.1	9.2
1938	68.3	65.5	8.2
1939	72.6	70.2	8.7
1940	78.3	75.7	9.1
1941	95.3	92.0	11.7
1942	122.7	116.2	16.0
1943	150.3	131.6	20.0
1944	165.9	145.6	21.0
1945	171.9	149.4	22.3
1946	176.9	159.2	25.3
1947	193.5	173.6	30.5
1948	211.9	190.8	30.8

[a] Source: Personal income and disposable personal income, U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce; income from farm marketings, Bureau of Agricultural Economics, U. S. Department of Agriculture.

[b] Includes government payments to farmers.

Table 6. — Gross Income From Selected Farm Products, Illinois, 1929-1948[a]

Year	Corn	Oats	Wheat	Soybeans	Hay	Cattle	Hogs	Sheep and lambs	Dairy products	Chickens	Eggs
					(thousands of dollars)						
1929	231,353	53,096	34,531	6,186	37,657	86,164	139,154	6,233	102,914	37,016	46,308
1930	131,295	43,295	27,668	8,225	29,689	72,537	124,068	4,436	95,329	27,749	35,931
1931	90,807	24,900	19,578	2,696	23,130	49,232	86,701	3,198	79,529	24,272	26,672
1932	113,975	21,421	10,913	3,647	16,661	42,255	53,927	2,778	64,111	18,090	19,167
1933	119,272	25,594	26,134	3,845	20,767	41,500	67,798	3,566	62,985	15,180	18,297
1934	132,568	16,720	31,044	11,830	41,055	53,084	67,231	3,887	71,833	17,344	22,824
1935	201,925	27,274	25,250	18,983	31,457	73,291	94,092	6,514	76,016	21,833	30,970
1936	226,467	40,584	37,128	24,129	37,026	78,914	125,933	5,853	87,283	24,826	28,550
1937	209,131	47,682	46,270	21,680	29,988	86,476	124,046	6,899	92,848	23,211	30,912
1938	167,033	26,843	24,954	21,553	25,150	86,274	114,756	5,944	83,546	20,286	27,857
1939	208,686	29,134	27,863	35,693	26,962	95,774	98,205	5,945	79,731	17,732	24,672
1940	200,528	44,496	27,892	29,675	34,573	118,763	110,097	5,857	83,668	16,822	25,201
1941	302,818	62,921	34,663	77,411	45,013	139,131	170,668	7,096	105,449	21,451	35,792
1942	375,241	67,516	15,125	108,830	54,388	172,698	272,626	9,567	127,655	28,124	54,390
1943	444,352	82,556	25,139	129,881	66,412	178,862	326,042	10,116	147,573	43,560	76,154
1944	435,704	71,324	35,994	151,486	69,703	171,583	324,201	8,223	154,270	40,218	71,150
1945	457,434	103,925	38,715	156,416	66,341	206,616	286,339	8,764	162,697	43,807	76,944
1946	763,699	132,205	38,335	196,610	62,789	214,920	377,508	11,866	198,025	46,327	73,504
1947	752,731	122,838	66,370	221,869	73,248	321,615	506,274	12,023	204,854	39,557	89,267
1948	742,221	36,558	86,140	188,410	76,690	343,823	482,131	14,149	193,384	38,569	80,948

[a] Source: Bureau of Agricultural Economics, U. S. Department of Agriculture.

Table 7. — Gross Income From Selected Farm Products as Percentages of Gross Income From the More Important Farm Products Combined for the Same Year, Illinois, 1929-1948

Year	Percent of total gross income[a] contributed by—										
	Corn	Oats	Wheat	Soy-beans	Hay	Cattle	Hogs	Sheep and lambs	Dairy prod-ucts	Chick-ens	Eggs
1929	28.3	6.5	4.2	.76	4.6	10.5	17.0	.76	12.6	4.5	5.7
1930	20.9	6.9	4.4	1.3	4.7	11.6	19.8	.71	15.2	4.4	5.7
1931	19.9	5.5	4.3	.59	5.1	10.8	19.0	.70	17.4	5.3	5.9
1932	29.8	5.6	2.9	.95	4.4	11.1	14.1	.73	16.8	4.7	5.0
1933	28.2	6.1	6.2	.91	4.9	9.8	16.0	.84	14.9	3.6	4.3
1934	25.7	3.2	6.0	2.3	8.0	10.3	13.0	.75	14.1	3.4	4.5
1935	30.4	4.1	3.8	2.9	4.7	11.0	14.2	.98	11.4	3.3	4.7
1936	30.0	5.4	4.9	3.2	4.9	10.5	16.7	.78	11.6	3.3	3.8
1937	27.5	6.3	6.1	2.9	3.9	11.4	16.3	.91	12.2	3.1	4.1
1938	26.2	4.2	3.9	3.4	4.0	13.6	18.0	.93	13.1	3.2	4.4
1939	29.0	4.1	3.9	5.0	3.8	13.3	13.7	.83	11.1	2.5	3.4
1940	26.5	5.9	3.7	3.9	4.6	15.7	14.6	.78	11.1	2.2	3.3
1941	28.4	5.9	3.3	7.3	4.2	13.1	16.0	.67	9.9	2.0	3.4
1942	27.6	5.0	1.1	8.0	4.0	12.7	20.1	.70	9.4	2.1	4.0
1943	27.3	5.1	1.5	8.0	4.1	11.0	20.0	.62	9.1	2.7	4.7
1944	26.9	4.4	2.2	9.4	4.3	10.6	20.0	.51	9.5	2.5	4.4
1945	27.1	6.1	2.3	9.3	3.9	12.2	16.9	.52	9.6	2.6	4.6
1946	34.7	6.0	1.7	8.9	2.9	9.8	17.1	.54	9.0	2.1	3.3
1947	30.5	5.0	2.7	9.0	3.0	13.0	20.5	.49	8.3	1.6	3.6
1948	31.7	1.6	3.7	8.0	3.3	14.7	20.6	.60	8.3	1.6	3.5
20-year average	27.8	5.1	3.6	4.8	4.4	11.8	17.2	.72	11.7	3.0	4.3

[a] Besides the commodities listed, the following were included in the total: barley (0.3); wool (0.2); turkeys (0.2); rye (0.7); red-clover seed (0.2); alsike-clover seed (0.02); sweet-clover seed (0.02); timothy seed (0.04); redtop seed (0.1); broomcorn (0.1); cowpeas (0.1); apples (0.5); peaches (0.2); pears (0.04); grapes (0.03); green peas for processing (0.1); sweet corn for processing (0.2); potatoes (0.4); sweet potatoes (0.05); onions (0.1); asparagus for canning and market (0.1); strawberries (0.1); tomatoes for market (0.1); and tomatoes for processing (0.1). The figures in curves are the twenty-year averages of percentages of gross income from all the products considered. None of those omitted from the table averaged as much as 1 percent of gross farm income.

Table 8. — Cash Receipts From Farm Marketings of Selected Farm Products, Illinois, 1929-1948[a]

Year	Corn	Soybeans	Oats	Wheat	Hay	Dairy products	Eggs	Chickens	Hogs	Cattle and calves	Sheep and lambs
						(thousands of dollars)					
1929	114,148	4,234	25,032	28,211	3,938	85,708	39,087	27,798	126,410	85,503	6,210
1930	87,885	6,880	16,557	22,838	5,498	80,074	30,000	20,809	112,850	71,894	4,419
1931	44,345	2,394	9,546	13,667	3,526	66,260	21,963	18,053	78,713	48,702	3,181
1932	37,049	3,133	8,262	9,303	2,138	53,149	15,417	13,048	48,735	41,809	2,741
1933	52,471	2,986	8,460	18,606	2,272	52,489	14,677	11,000	62,387	41,052	3,523
1934	49,113	7,565	2,843	26,605	3,590	60,140	18,419	14,041	61,843	52,545	3,825
1935	40,111	12,878	5,277	20,339	2,408	63,920	24,948	16,971	83,202	72,076	6,491
1936	103,369	16,507	10,004	30,672	3,323	73,068	22,783	19,402	113,837	77,873	5,833
1937	88,297	18,581	15,613	34,989	2,744	78,128	25,106	18,452	112,624	85,361	6,877
1938	93,016	20,090	8,835	23,220	1,459	70,211	22,131	15,063	105,666	85,200	5,926
1939	97,329	28,875	7,287	23,270	2,072	65,487	19,767	13,602	90,631	94,782	5,926
1940	113,912	20,378	10,592	25,875	2,442	72,615	20,158	14,043	103,415	117,596	5,838
1941	98,504	61,985	17,832	27,133	2,951	92,985	29,344	18,562	160,833	137,997	7,074
1942	140,652	89,699	18,037	15,173	5,035	113,309	46,317	25,303	257,963	170,978	9,539
1943	143,570	134,700	22,095	16,652	4,974	130,667	66,033	41,727	309,977	176,606	10,085
1944	162,087	102,568	19,175	23,552	7,198	139,333	62,375	37,663	310,031	168,874	8,192
1945	156,157	145,324	31,289	31,526	7,736	146,022	67,368	44,524	270,044	203,497	8,732
1946	222,378	180,042	54,261	32,186	6,329	176,100	64,045	43,266	357,082	211,082	11,829
1947	359,616	185,207	52,058	53,213	9,210	177,482	78,100	38,201	479,505	316,411	11,976
1948	311,063	193,766	60,017	68,432	9,457	193,384	80,948	38,569	457,428	337,871	14,097

[a] Source: Bureau of Agricultural Economics, U. S. Department of Agriculture.

Table 9. — Cash Receipts From Farm Marketings of Selected Farm Products as Percentages of Total Cash Receipts From Farm Marketings of All Crops, Livestock, and Livestock Products for the Same Year, Illinois, 1929-1948

Year	Percent of total cash receipts contributed by—										
	Corn	Soy-beans	Oats	Wheat	Hay	Dairy prod-ucts	Eggs	Chick-ens	Hogs	Cattle and calves	Sheep and lambs
1929	19.2	.7	4.2	4.8	.66	14.4	6.6	4.7	21.3	14.4	1.0
1930	17.7	1.4	3.3	4.6	1.10	16.1	6.0	4.2	22.7	14.4	.9
1931	12.9	.7	2.8	4.0	1.00	19.3	6.4	5.3	22.9	14.2	.9
1932	14.5	1.2	3.2	3.6	.83	20.8	6.0	5.1	19.0	16.3	1.1
1933	17.8	1.0	2.9	6.3	.77	17.8	5.0	3.7	21.2	14.0	1.2
1934	15.1	2.3	.9	8.1	1.10	18.4	5.6	4.3	18.9	16.1	1.2
1935	10.5	3.4	1.4	5.3	.63	16.7	6.5	4.4	21.8	18.8	1.7
1936	20.3	3.2	2.0	6.0	.65	14.4	4.5	3.8	22.4	15.3	1.1
1937	16.7	3.5	2.9	6.6	.52	14.8	4.7	3.5	21.3	16.1	1.3
1938	19.2	4.1	1.8	4.8	.30	14.5	4.6	3.1	21.8	17.5	1.2
1939	20.0	5.9	1.5	4.8	.43	13.4	4.1	2.8	18.6	19.5	1.2
1940	20.9	3.7	1.9	4.8	.45	13.4	3.7	2.6	19.0	21.6	1.1
1941	14.0	8.8	2.5	3.9	.42	13.2	4.2	2.6	22.9	19.6	1.0
1942	14.9	9.5	1.9	1.6	.53	12.0	4.9	2.7	27.3	18.1	1.0
1943	12.7	11.9	2.0	1.5	.44	11.5	5.8	3.7	27.4	15.6	.9
1944	13.9	8.8	1.6	2.0	.62	12.0	5.4	3.2	26.6	14.5	.7
1945	13.1	12.2	2.6	2.7	.65	12.3	5.7	3.7	22.7	17.1	.7
1946	15.2	12.3	3.7	2.2	.43	12.0	4.4	3.0	24.4	14.4	.8
1947	18.8	9.7	2.7	2.8	.48	9.3	4.1	2.0	25.1	16.6	.6
1948	16.6	10.3	3.2	3.6	.50	10.3	4.3	2.0	24.4	18.0	.8
20-year average	16.2	5.7	2.4	4.2	.63	14.3	5.1	3.5	22.6	16.6	1.0

Table 10. — Indexes of Prices Received by Illinois Farmers and Prices Paid by U. S. Farmers and the Ratio Between the Two, 1929-1948 (1910-1914 = 100)

Year	Index of prices received by Illinois farmers	Index of prices paid by U. S. farmers[a]	Revised index of prices paid[b]	Ratio of prices received (Illinois) to prices paid (U. S.)	
				Old formula	Revised formula
1929	151	165	160	92	94
1930	130	159	151	82	86
1931	91	140	130	65	70
1932	63	124	112	51	56
1933	65	119	109	55	60
1934	86	128	120	67	72
1935	115	128	124	90	93
1936	119	127	124	94	96
1937	134	132	131	102	102
1938	102	126	124	81	82
1939	95	123	123	77	77
1940	101	124	124	81	81
1941	127	131	132	97	96
1942	160	149	152	107	105
1943	187	160	170	117	110
1944	187	168	182	111	103
1945	194	171	189	113	103
1946	231	191	207	121	112
1947	297	230	240	129	124
1948	311	248	259	125	120

[a] Revised slightly. Source: Bureau of Agricultural Economics, Supplement No. 1, *Agricultural Prices*, January, 1950.

[b] Prices paid by U. S. farmers for commodities, interest, taxes, and wage rates. Wage rates were added to the older index and weights were changed. Source: Bureau of Agricultural Economics, Supplement No. 1, *Agricultural Prices*, January, 1950.

Table 11. — Average Annual Prices Received by Illinois Farmers for Selected Commodities and Index of Prices Received by Illinois Farmers, 1929-1948[a]

Year	All farm products	Crops	Livestock and products	Corn	Wheat	Oats	Barley	Soybeans	Alfalfa hay	Milk cows
	(percent of 1910-1914)									
1929	151	139	157	$.75	$1.12	$.39	$.54	$1.59	$15.80	$100.25
1930	130	119	136	.54	.76	.30	.49	1.17	17.05	79.58
1931	91	75	100	.25	.40	.17	.38	.35	12.14	55.17
1932	63	43	73	.27	.42	.13	.28	.47	7.99	38.42
1933	65	61	68	.50	.85	.32	.50	.81	11.63	35.17
1934	86	97	80	.79	.85	.43	.73	.90	18.45	35.17
1935	115	110	118	.64	.84	.25	.44	.74	10.30	50.42
1936	119	113	123	1.05	1.02	.40	.92	1.18	15.37	55.33
1937	134	138	133	.47	1.03	.28	.66	.81	12.88	61.00
1938	102	76	115	.46	.61	.23	.41	.64	8.30	60.17
1939	95	74	106	.52	.70	.30	.41	.77	8.14	63.42
1940	101	89	106	.61	.71	.30	.46	.85	9.13	65.33
1941	127	104	139	.74	1.01	.41	.69	1.54	13.04	79.75
1942	160	130	176	.90	1.18	.49	.76	1.60	14.95	102.42
1943	187	166	198	1.06	1.48	.73	1.11	1.80	22.80	129.25
1944	187	185	188	1.05	1.48	.71	1.10	2.04	21.18	124.42
1945	194	185	198	1.21	1.56	.67	1.11	2.08	19.60	125.50
1946	231	221	237	1.51	1.98	.80	1.39	2.52	20.75	146.58
1947	297	293	299	2.22	2.29	1.06	1.64	3.39	23.00	173.33
1948	311	287	323	1.35	2.15	.75	1.40	2.40	23.21	194.17

Year	Beef cattle	Veal calves	Sheep	Lambs	Hogs	Milk wholesale	Butter-fat	Chickens	Wool	Eggs
1929	$10.50	$13.50	$6.50	$12.00	$9.60	$2.35	$.44	$.213	$.34	$.286
1930	9.00	11.00	4.90	8.90	9.00	2.20	.33	.172	.21	.217
1931	6.40	7.60	2.95	6.30	6.10	1.80	.24	.149	.14	.161
1932	5.00	5.50	2.25	4.90	3.55	1.35	.17	.107	.09	.125
1933	4.35	5.10	2.30	5.40	3.70	1.25	.18	.087	.21	.119
1934	5.00	5.40	2.80	6.40	4.25	1.45	.22	.111	.23	.155
1935	7.10	7.90	3.60	7.90	8.80	1.50	.27	.152	.20	.219
1936	6.80	8.00	3.60	8.70	9.60	1.80	.31	.148	.29	.200
1937	8.30	9.00	3.95	9.30	9.80	1.90	.32	.161	.34	.193
1938	7.60	8.90	3.35	7.80	8.00	1.65	.25	.148	.18	.178
1939	8.10	9.10	3.40	8.10	6.40	1.55	.22	.129	.23	.149
1940	8.80	9.60	3.45	8.40	5.50	1.65	.27	.132	.30	.158
1941	10.00	11.20	4.40	9.80	9.30	2.05	.33	.158	.39	.212
1942	11.70	13.60	5.40	12.40	13.30	2.40	.38	.193	.41	.280
1943	13.10	14.40	6.40	13.40	14.00	2.95	.48	.244	.42	.348
1944	12.00	13.30	5.50	13.40	13.40	2.95	.49	.239	.43	.300
1945	13.30	14.20	6.10	13.60	14.20	2.95	.49	.249	.44	.336
1946	15.60	16.20	7.00	16.20	17.80	3.73	.62	.285	.45	.329
1947	20.00	22.80	7.40	21.30	24.30	3.88	.68	.268	.41	.400
1948	24.60	26.60	8.80	23.20	23.40	4.44	.74	.315	.41	.409

[a] All grains are computed per bushel; alfalfa hay, per ton; milk cows, per cow; livestock and milk, per hundredweight; butterfat, chickens, and wool, per pound; and eggs, per dozen.

Table 12. — Indexes of Prices Received by Illinois Farmers for Groups of Commodities and Individual Commodities as a Percentage of the Index of Prices Received for All Crops, Livestock, and Livestock Products for the Same Year, 1929-1948

Year	Food grains	Feed grains and hay	Oil-bearing crops	Meat animals	Dairy products	Poultry and eggs	Corn	Wheat	Oats	Barley	Soybeans	Alfalfa hay
1929	81.5	91.4	107.3	101.3	107.3	111.3	95.9	81.3	71.5	55.7	156.8	121.1
1930	73.8	91.5	103.1	103.8	111.5	100.0	96.8	73.6	70.8	63.5	149.9	129.7
1931	63.7	81.3	75.8	102.2	130.8	109.9	85.3	63.3	63.6	66.3	111.3	165.9
1932	71.4	60.3	52.4	101.6	147.6	128.6	60.2	70.8	62.7	80.6	76.3	160.2
1933	107.7	84.6	87.7	92.3	133.8	109.2	84.9	107.1	93.1	95.2	126.6	140.0
1934	107.0	115.1	100.0	82.6	115.1	102.3	116.3	107.4	116.3	125.5	145.7	185.6
1935	83.5	106.1	66.1	105.2	95.7	104.3	111.0	83.2	80.1	78.7	96.9	128.4
1936	90.8	100.8	68.9	104.2	105.0	97.5	108.7	91.3	68.6	98.7	100.0	105.6
1937	89.6	113.4	77.6	103.0	98.5	83.6	121.0	89.3	76.6	99.5	113.4	112.0
1938	72.5	73.5	63.7	114.7	113.7	103.9	76.1	72.5	59.3	82.5	93.0	106.1
1939	76.8	75.8	68.4	114.7	113.7	94.7	78.0	76.6	77.6	68.5	98.6	83.2
1940	87.1	91.1	71.3	105.0	113.9	92.1	95.6	87.1	83.4	72.3	104.1	86.7
1941	78.7	82.7	85.0	113.4	108.7	92.9	85.5	79.6	74.6	68.7	123.6	84.3
1942	76.9	81.2	89.4	117.5	100.6	93.1	83.0	77.4	78.9	73.4	130.6	88.2
1943	83.4	89.3	78.1	108.0	102.1	100.0	90.4	83.1	92.9	84.9	113.7	105.4
1944	89.8	98.4	88.8	101.6	103.7	91.4	98.7	89.5	104.1	98.4	129.3	120.1
1945	89.2	93.3	93.3	104.6	99.0	95.9	94.8	88.5	92.2	89.2	147.5	111.1
1946	87.0	98.7	86.1	106.5	104.8	82.3	102.9	86.2	87.7	88.4	125.9	87.6
1947	90.6	104.0	96.0	112.1	87.5	71.4	110.3	89.8	85.8	85.2	139.7	73.1
1948	78.5	99.0	89.4	115.1	92.3	72.0	104.7	78.0	79.5	80.4	130.2	79.3

Year	Hogs	Beef cattle	Veal calves	Sheep	Lambs	Milk cows	Milk wholesale	Butterfat	Chickens	Eggs	Wool
1929	85.4	117.3	122.4	101.1	134.0	124.0	101.1	118.9	127.1	90.2	118.5
1930	93.1	116.8	117.7	88.5	115.5	97.0	109.9	103.6	119.2	79.5	85.0
1931	90.1	118.6	116.2	76.0	116.7	93.7	128.5	107.7	147.5	84.3	81.0
1932	75.7	133.8	121.4	83.8	131.1	103.0	139.2	110.2	153.0	94.4	75.2
1933	76.5	112.9	109.1	83.1	140.2	91.2	124.9	113.1	120.6	87.2	170.0
1934	66.4	98.0	87.3	76.4	125.5	75.5	109.5	104.4	116.3	85.8	140.8
1935	102.9	104.1	95.6	73.5	115.8	88.7	84.7	95.8	119.0	90.7	91.5
1936	108.4	96.4	93.5	71.0	123.3	87.2	98.2	106.3	112.0	80.0	128.2
1937	98.3	104.5	93.4	69.2	117.0	84.4	92.1	97.5	108.2	68.6	133.5
1938	105.4	125.7	121.4	77.1	128.9	110.1	105.0	100.0	130.7	83.1	92.8
1939	90.5	143.8	133.3	84.0	143.8	122.9	105.9	94.5	122.3	74.7	127.5
1940	73.2	146.9	132.2	80.2	140.3	119.3	106.0	109.1	117.7	74.5	156.3
1941	98.4	132.8	122.7	81.3	130.2	115.4	104.8	106.1	112.0	79.5	161.7
1942	111.8	123.3	118.2	79.2	130.7	118.2	97.4	96.9	108.7	83.3	134.9
1943	100.6	118.1	107.1	80.3	120.9	127.9	102.5	104.8	117.5	88.6	118.2
1944	96.3	108.2	98.9	69.0	120.9	122.9	104.2	107.0	115.1	76.4	121.0
1945	98.4	115.6	101.8	73.8	118.2	119.4	98.8	103.1	115.6	82.5	116.6
1946	103.5	113.9	97.5	71.1	118.3	117.6	104.8	109.6	111.2	67.8	102.5
1947	110.0	113.6	106.8	58.5	120.9	108.2	84.8	93.5	81.3	64.1	72.7
1948	101.1	133.4	119.0	66.4	125.8	115.8	92.7	97.1	91.2	62.6	69.4

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